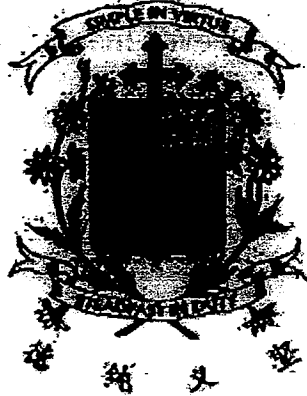


Name : _____ ()

Class : Primary 6 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)



Primary 6 Mathematics

2015 Semestral Assessment One

Paper 1

Booklet A

**12
13 May 2015**

**15 questions
20 marks**

Total Time for Booklets A and B : 50 minutes

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

The use of calculators is NOT allowed.

This booklet consists of 8 printed pages including the cover page.

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3, or 4) on the Optical Answer Sheet.

(20 marks)

1. What is 108 716 in words?

- (1) One hundred and eighty thousand, seven hundred and six
- (2) One hundred and eighty thousand, seven hundred and sixteen
- (3) One hundred and eight thousand, seven hundred and sixteen
- (4) One hundred and eight thousand, seven hundred and sixty

2. What is $3050 \div 500$?

- (1) 0.061
- (2) 0.61
- (3) 6.1
- (4) 61.0

3. Which of the following ratios is in the simplest form?

- (1) 6 : 18 : 14
- (2) 15 : 60 : 80
- (3) 28 : 49 : 35
- (4) 36 : 40 : 65

4. What is $8\ell\ 3\ ml$ in ℓ ?

(1) $8.300\ \ell$

(2) $8.003\ \ell$

(3) $0.830\ \ell$

(4) $0.803\ \ell$

5. $\frac{4}{7}$ of Aiken's pocket money is $\frac{1}{2}$ of Bose's pocket money. What is the ratio of Aiken's pocket money to Bose's pocket money?

(1) $7:8$

(2) $8:7$

(3) $7:2$

(4) $2:7$

3. Express 0.2% as a fraction.

(1) $\frac{1}{5}$

(2) $\frac{1}{50}$

(3) $\frac{1}{500}$

(4) $\frac{1}{5000}$

7. Clinton and Duncan had a total of 45 assessment books. Clinton had 80% of what Duncan had. How many assessment books did Duncan have?

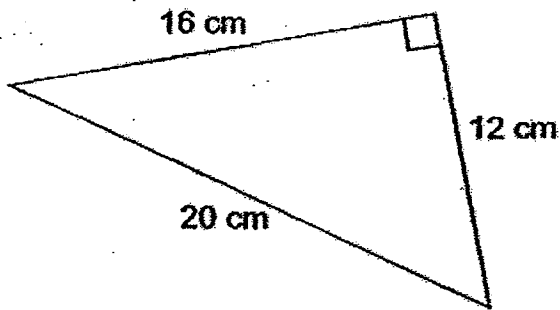
(1) 36

(2) 25

(3) 20

(4) 9

8. What is the area of the triangle shown below?



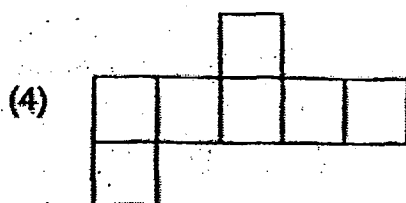
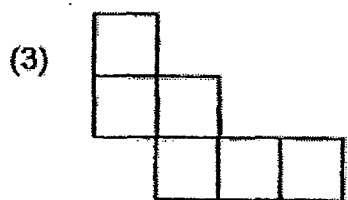
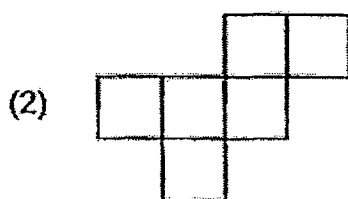
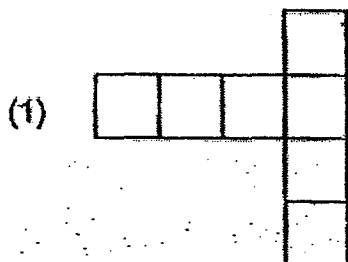
(1) 96 cm^2

(2) 120 cm^2

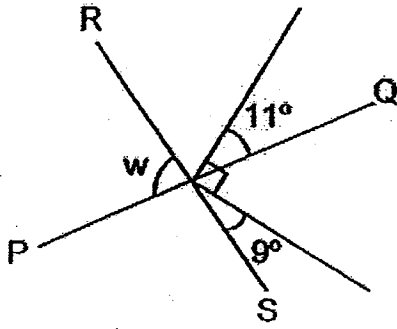
(3) 160 cm^2

(4) 192 cm^2

9. Which one of the following is the net of a cube?

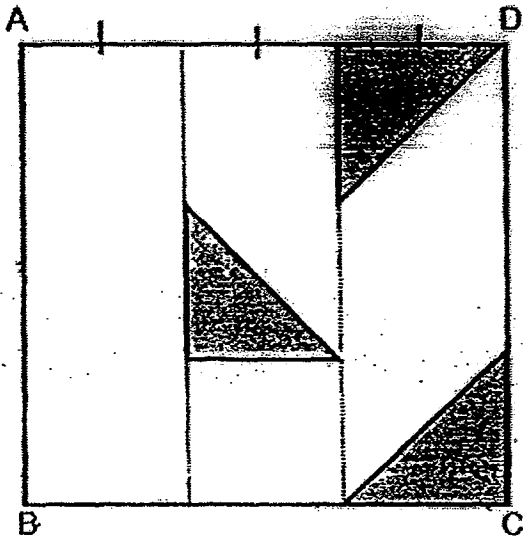


10. The figure below is not drawn to scale. PQ and RS are straight lines. Find $\angle w$.



- (1) 79°
(2) 81°
(3) 88°
(4) 99°
11. Elera wanted to work out the answer of $9908 - 117$ using the calculator. She accidentally keyed in $9980 - 117$. Without clearing the answer that was displayed on the calculator, what did Elera need to key in to obtain the correct answer?
- (1) Subtract 72
(2) Add 72
(3) Subtract 720
(4) Add 720

12. ABCD is a square. The triangles in the square are isosceles triangles of the same size. What percentage of the square is shaded?



(1) $16\frac{2}{3}\%$

(2) $33\frac{1}{3}\%$

(3) $66\frac{2}{3}\%$

(4) $83\frac{1}{3}\%$

13. Flex had 24 keychains. He gave some keychains to his colleague and 6 keychains to his cousin. In the end, he had $\frac{1}{6}$ of his original number of keychains left. How many keychains did he give his colleague?

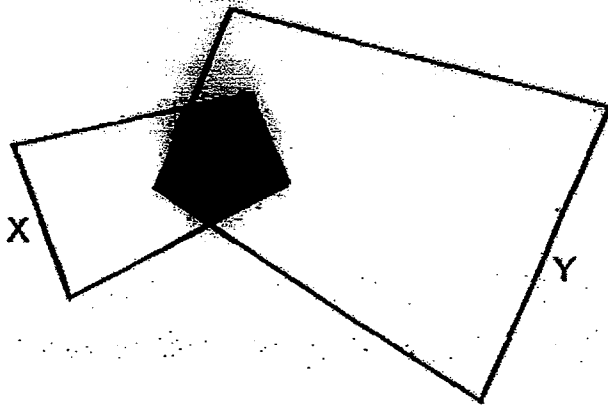
(1) 20

(2) 15

(3) 14

(4) 9

14. The area of Y is 3 times of the area of X. The area of the shaded part of X is $\frac{1}{3}$ of the area of the unshaded part of X. What is the ratio of the shaded part of Y to the unshaded area of Y?



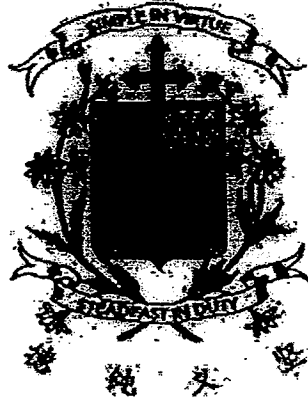
- (1) 1 : 11
(2) 1 : 9
(3) 11 : 12
(4) 11 : 1
15. The sum of 20 numbers is 9. If each number were to be increased by 0.03, what would be the sum of the 20 numbers in the end?
- (1) 9.03
(2) 9.06
(3) 9.27
(4) 9.60

**** END OF BOOKLET A****

Name : _____ ()

Class : Primary 6 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)



Primary 6 Mathematics

2015 Semestral Assessment One

Paper 1

Booklet B

12 May 2015

**15 questions
20 marks**

TOTAL TIME FOR BOOKLET A & B : 50 MINUTES

INSTRUCTIONS TO CANDIDATES

DO NOT TURN OVER THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

THE USE OF CALCULATORS IS NOT ALLOWED.

This booklet consists of 8 printed pages including the cover page.

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

Do not write in this space.

16. What number is 53 000 when rounded off to the nearest thousand?
Write down the greatest possible number.

Ans : _____

17. Express 13 out of 10 as a percentage.

Ans : _____ %

18. Find the value of $4 + d + 7$ when $d = 5$.
Give your answer as a mixed number.

Ans : _____



Do not
write in
this
space.

19. Study the model below. What is the ratio of Y to the total of X and Y?
Give your answer in the simplest form.



Ans : _____

20. What is the missing number in the box?

$$135 = 0.135 \times \boxed{?}$$

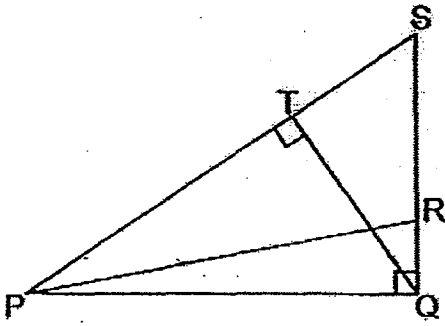
Ans : _____

21. $\frac{7}{8}$ kg of chickpeas was divided into 5 packets of the same size. What was the mass of each packet in kg?

Ans : _____ kg



22. The figure below shows triangle PQS. SR is the base of triangle PRS. Write down the height of triangle PRS.



Do not write in this space.

Ans : _____

23. The height of a shoe rack is 1.08 m. The height of a ladder is 40 cm more than the height of the shoe rack, What is the height of the ladder? Give your answer as a decimal.

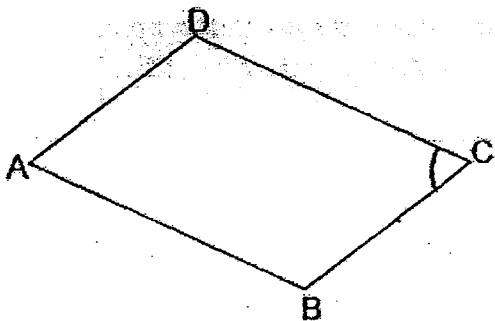
Ans : _____ m

24. $\frac{1}{4}$ of the diners at a buffet were children. The rest were adults. $\frac{3}{7}$ of the adult diners were women. What fraction of all the diners were women?

Ans : _____

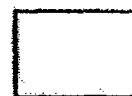


25. The figure below shows a parallelogram ABCD. Write down the angle that is equal to $\angle DCB$.



Ans : \angle _____

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this
space.



Questions 26 to 30 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

Do not write in this space.

26. Last week, Zephy collected 10 empty bottles. This week, she collected 25 empty bottles. What was the percentage increase in the number of empty bottles collected?

Ans : _____ %

27. Valen, Winsy and Xanthus shared some dice in the ratio 4 : 3 : 2. Valen gave all her dice equally to Winsy and Xanthus. In the end, Winsy had 95 dice. How many dice did Valen give Winsy and Xanthus altogether?

Ans : _____



3. Saj spent 50 minutes on his project. He spent e minutes more than Thor. Thor spent 10 minutes less than Udell. How much time did Udell spend on his project? Leave your answer in minutes.

Ans : _____ min

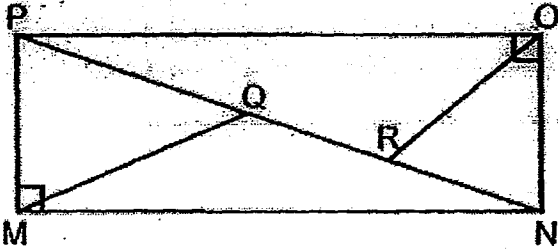
9. The total cost of 8 pumpkins is \$38. The average cost of 2 of the pumpkins is \$4. What is the average cost of the remaining pumpkins?

Ans : \$ _____

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write in this
space.



30. In the figure below, the ratio of the area of MPQ to the area of MQN is 5 : 9. The area of ORN is $\frac{1}{2}$ of the area of MPQ. What is the ratio of the area of MNOP to the area of ORN?



Do not
write in this
space

Ans: _____



****END OF PAPER 1****

Name : _____ ()

Class : Primary 6 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)



2015 Semestral Assessment One

Paper 2

12 May 2015

Paper 1	40
Paper 2	60
Total	100

TIME: 1 hour 40 minutes

INSTRUCTIONS TO CANDIDATES

DO NOT TURN OVER THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

THE USE OF AN APPROVED CALCULATOR IS EXPECTED, WHERE APPROPRIATE.

This booklet consists of 17 printed pages including the cover page.

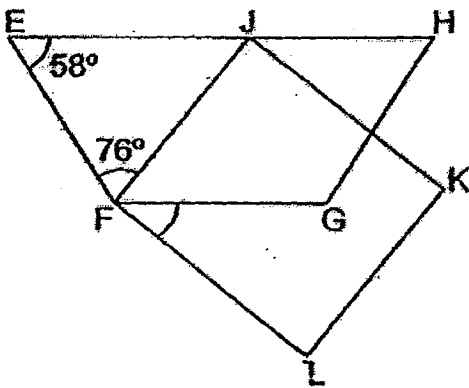
Questions 1 to 5 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

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1. Amery wanted to tie up some boxes. She used 40.5 cm of string for each box. She tied up 4 boxes and realised that she needed another 364.5 cm to tie the rest of the boxes. How many boxes did Amery have to tie altogether?

Ans : _____

2. The figure below, not drawn to scale, shows a trapezium EFGH and a rectangle FLKJ. Find $\angle LFG$.



Ans : _____ °

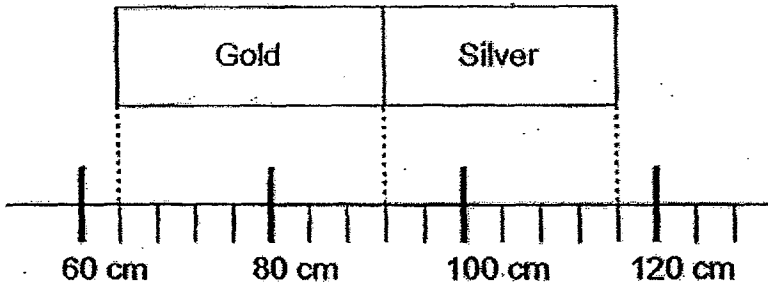


3. Byron and Clint had an average savings of \$685. Dillys had savings of \$880. What is the average savings of Byron, Clint and Dillys?

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in this space

Ans : \$ _____

4. Eu Ya divided a vanguard sheet into two sections. She coloured the two sections using gold and silver paint.



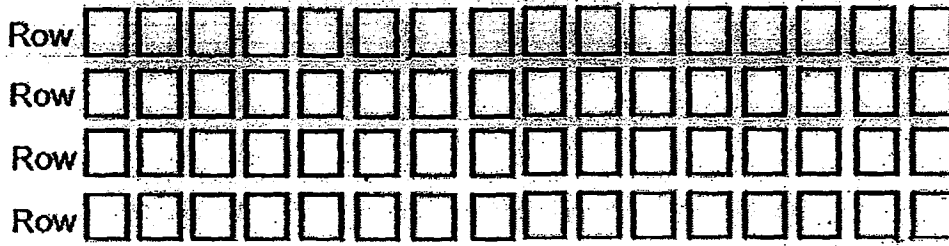
What is the ratio of the total length of the gold and silver section to the length of the gold section to the length of the silver section? Give your answer in the simplest form.

Ans : _____



5. There are 64 chairs in a lecture theatre. A group of pupils are asked to arrange the 64 chairs in different ways. They can arrange the chairs into rows. Every row must have the same number of chairs. One way of arranging the chairs is shown below.

Do not write in this space.



What is the total number of different ways, including the one shown above, that the 64 chairs can be arranged?

Ans : _____



For questions 6 to 18; show your working clearly and write your answers in the spaces provided. The number of marks available is shown in brackets [] at the end of each question or part-question. (50 marks)

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6. The table below shows the charges for surfing the internet in a cyber café.

Duration	Charges
1 st hour	\$4.00
For every additional half an hour	\$1.25

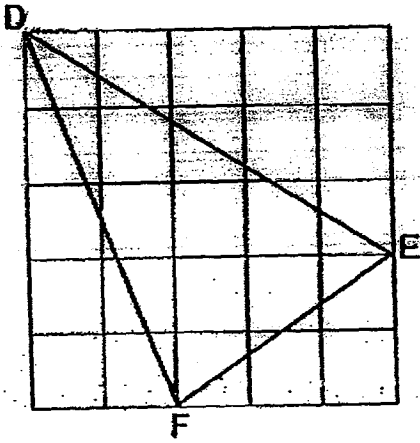
Flygera paid \$7.75 for surfing the internet in the café. What was the maximum number of hours she spent surfing the internet?

Ans _____ [3 m]

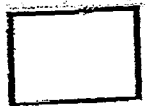


7. Triangle DEF is drawn on a 1-cm grid. What is the area of Triangle DEF?

Do not write
in this space



Ans: _____ [3 m]



8. There were 1456 English books in a library. This was 12% more than the number of Chinese books. How many more English books than Chinese books were there?

Do not write
in this space

Ans : _____ [3 m]



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in this space

1. The total cost of 10 similar mouse pads was \$5.80 more than the total cost of 6 similar USB flash drives. Each USB flash drive cost \$45.95. Graine bought 1 such mouse pad and paid \$100. How much change did he receive?

Ans: _____ [3 m]



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in this space.

10. Hasia and Inka had an equal amount of money. Hasia received \$60 from her grandaunt and Inka spent \$332. Then Inka had $\frac{1}{9}$ of what Hasia had. How much in total did the two of them have in the end?

Ans : _____ [3 m]



11. Lusin had 400 purple, red and pink crystals. 60% of the crystals were purple. There were 4 times as many red crystals as pink crystals. Lusin bought some more pink crystals. Then the number of pink crystals increased to 36% of the total number of red and pink crystals. How many pink crystals did Lusin buy?

Do not write
in this space.

Ans : _____ [4 m]



12. A group of people participated in a quiz. $\frac{1}{7}$ of the women and $\frac{3}{4}$ of the men were eliminated from the quiz. A total of 84 women and men were eliminated. The number of women eliminated was the same as the number of men eliminated. How many women and men were not eliminated from the quiz?

Do not write
in this space.

Ans : _____ [4 m]



13. Study the advertisement below.

Do not write
in this space.

Makan Deli Kitchen
Dining Vouchers For Sale!
For every 7 vouchers purchased, get a 15%
discount on the 8th voucher.

Every dining voucher cost \$20. Namie purchased 90 vouchers. How much did Namie pay altogether?

Ans : _____ [4 m]



14. Kyrie used some of her bonus to donate to a hospice, an orphanage and an old folks' home. She donated 30% of her bonus to the hospice and 40% of the remaining bonus to the orphanage. She donated \$1600 more to the old folks' home than to the orphanage. In the end, she had \$2054 left. How much did Kyrie donate to the hospice, the orphanage and the old folks' home altogether?

Do not write
in this space.

Ans : _____ [4 m]



Do not write
in this space.

15. Baker Joon bought some flour. He packed all the flour equally into smaller packs of $\frac{2}{5}$ kg each. If he were to pack all the flour equally into packs of $1\frac{1}{5}$ kg each, he would have 250 fewer packs of flour. How much flour did Baker Joon buy altogether?

Ans : _____ [4 m]



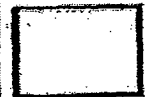
16. Dane, Enzo and Fraser shared some game cards. Dane had $\frac{2}{5}$ of what Enzo had. Enzo had 6 times of what Fraser had. After Dane lost some of his game cards in school, he had $\frac{1}{7}$ of the total game cards that Enzo and Fraser had. The three boys had 280 game cards altogether in the end.

Do not write in this space.

- (a) What was the ratio of Dane's share to Enzo's share to Fraser's share at first?
- (b) How many game cards did Dane lose in school?

Ans : (a) _____ [2 m]

(b) _____ [3 m]



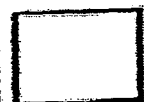
17. Olwyn bought some peaches, lemons and avocados in the ratio 3 : 1 : 6. The prices of each type of fruit are shown in the table below.

Fruit	Price per fruit
Peach	\$2.50
Lemon	\$0.50
Avocado	\$3.00

Olwyn spent \$52 altogether. How many avocados did she buy?

Do not write in this space.

Ans : _____ [5 m]

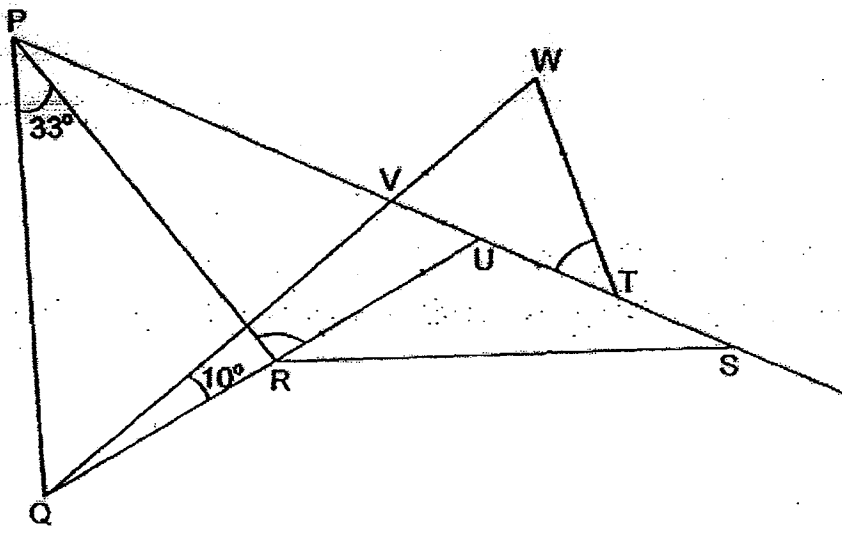


18.

The figure below is not drawn to scale. PQU is an equilateral triangle. $SUVP$ and QVW are straight lines.

Do not write in this space.

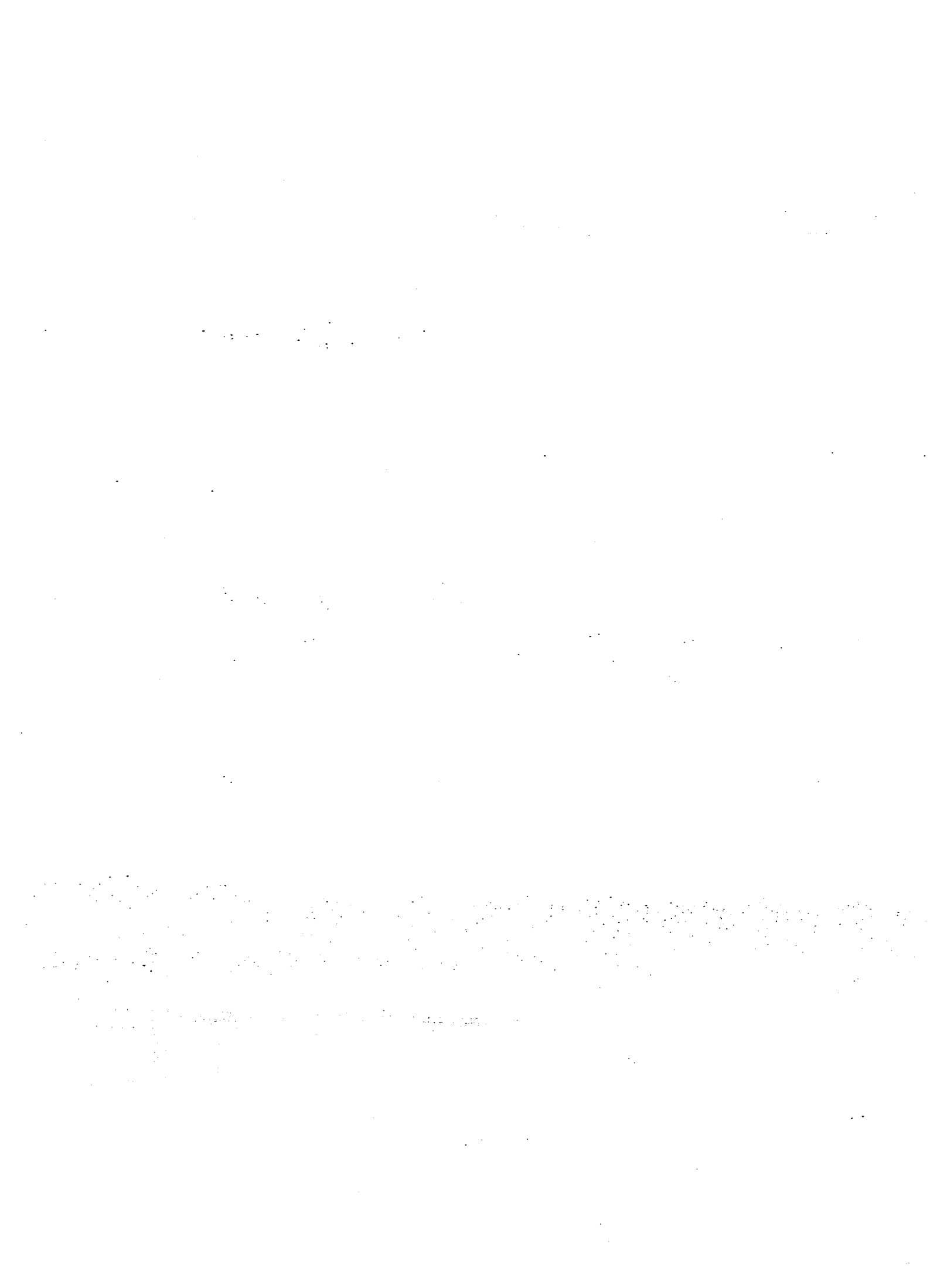
- (a) Find $\angle PRU$.
- (b) Find $\angle VTW$.



Ans : (a) _____ [2 m]

(b) _____ [3 m]





**CHIJ ST NICHOLAS GIRLS' SCHOOL
PRIMARY 6 MATHEMATICS 2015
SEMESTRAL ASSESSMENT 1**

- 1) 3 2) 3 3) 4 4) 2 5) 1 6) 3
7) 2 8) 1 9) 2 10) 3 11) 1 12) 1
13) 3 14) 1 15) 4

16) 53499

17) 130%

18) $4/5/7$

19) 2 : 3

20) 1000

21) $7/40$ kg

22) PQ

23) 1.48 m

24) $3/7 \times 3/4 = 9/28$

25) Angle DAB

26) $(25-10)/10 \times 100\% = 150\%$

27) $5u - 95$

$$4u - 4/5 \times 95 = 76$$

28) $(60-e)$ min

$$\begin{aligned} 29) \quad & 4 \times 2 = 8 \\ & 38 - 8 = 30 \\ & 30 / (8 - 2) = \$5 \end{aligned}$$

$$\begin{aligned} 30) \quad & 5 \div 2 = 2.5 \\ & (5 + 9) \times 2 = 28 \\ & 28 : 2.5 = 56 : 5 \end{aligned}$$

Paper 2

$$\begin{aligned} 1) \quad & 40.5 \times 4 = 162 \\ & 162 + 364.5 = 526.5 \\ & 526.5 \div 40.5 = 13 \text{ boxes} \end{aligned}$$

$$\begin{aligned} 2) \quad & 180 - 58 - 76 = 46 \\ & 90 - 46 = 44^\circ \end{aligned}$$

$$\begin{aligned} 3) \quad & 685 \times 2 = 1370 \\ & (1370 + 880) / 3 = \$750 \end{aligned}$$

$$\begin{aligned} 4) \quad & \text{Length of gold} = 92 - 64 = 28 \text{ cm} \\ & \text{Length of silver} = 116 - 92 = 24 \text{ cm} \\ & 28 + 24 : 28 : 24 \\ & \text{Ans: } 13 : 7 : 6 \end{aligned}$$

$$\begin{aligned} 5) \quad & 1 \times 64, 64 \times 1 \\ & 2 \times 32, 32 \times 2 \\ & 4 \times 16, 16 \times 4 \\ & 8 \times 8 \\ & \text{Ans: } 7 \text{ ways} \end{aligned}$$

$$\begin{aligned} 6) \quad & 7.75 - 4 = 3.75 \\ & 3.75 \div 1.25 = 3 \\ & 3 \times 1/2 = 1.5 \\ & 1.5 + 1 = 2.5 \text{ hours} \end{aligned}$$

7) $5 \times 5 - \frac{1}{2} \times 5 \times 3 - \frac{1}{2} \times 2 \times 3 - \frac{1}{2} \times 2 \times 5 = 9.5 \text{ sq cm}$

8) $1456 \div (100+12) = 13$

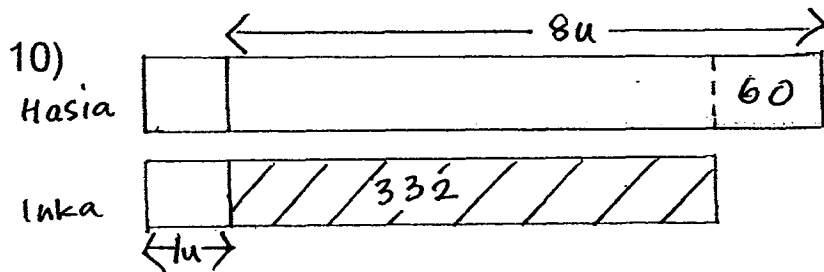
$13 \times 12 = 156$ more English books than Chinese books

9) $6 \times \$45.95 = \275.70

$\$275.70 + \$5.80 = \$281.50$

$\$281.50 \div 10 = \28.15

$\$100 - \$28.15 = \$71.85$



$8u - \$332 + \$60 = \$392$

$10u - \frac{10}{8} \times \$392 = \$490$

11) $400 \div (15+8+2) = 400 \div 25 = 16$

$16 \times 8 = 128$

$128 \div (100-36) = 2$

$2 \times 36 = 72$

$16 \times 2 = 32$

$72 - 32 = 40$ pink crystals

12) $1W + 3M = 84$


$1W = 3M = 84 \div 2 = 42$

$6W = 6 \times 42 = 252$

$1M = 42 \div 3 = 14$

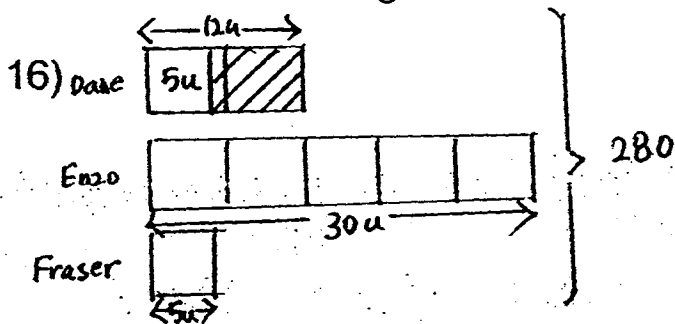
Ans: $252 + 14 = 266$

13) $90 \div 8 = 11 \text{ R}2$
 $11 \times 7 = 77$
 $77 \times 20 = 1540$
 $11 \times 1 = 11$
 $85/100 \times 20 = 17$
 $17 \times 11 = 187$
 $2 \times 20 = 40$
 $40 + 187 + 1540 = \$1767$

14) 

$2054 + 1600 = 3654$
 $3654 \div 7 \times 5 = 2610$
 $2610 \times 10 = 26100$
 $26100 - 2054 = \$24046$

15) $1.2 - 0.4 = 0.8$
 $1.2 \div 0.4 = 3$
 $250 \times 0.4 = 100$
 $100 \div 0.8 = 125$
 $125 \times 1.2 = 150 \text{ kg}$



a) $12 : 30 : 5$
b) $40u - 280$
 $7u - 7/40 \times 280 = 49 \text{ cards}$

$$17) 3 \times 2.5 + 1 \times 0.5 + 6 \times 3 = 26u$$

$$52 \div 26 = 2$$

$$2 \times 6 = 12 \text{ avocados}$$

$$18a) 180 \div 3 = 60^\circ$$

$$60 - 33 = 27^\circ$$

$$180 - 27 - 60 = 93^\circ$$

$$b) 180 - 10 - 60 = 110^\circ$$

$$180 - 110 = 70^\circ$$

$$180 - 70 - 70 = 40^\circ$$

